

S/N NEW FILING

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

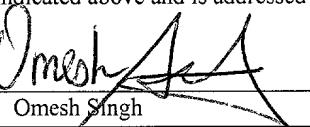
Applicant: YAO ET AL. Examiner: UNKNOWN
Serial No.: NEW FILING Group Art Unit: UNKNOWN
Filed: HEREWITH Docket No.: SEA2655/30874.64USC1
Title: METHOD APPARATUS OF DISC BURNISHING WITH A GLIDE/BURNISH HEAD

CERTIFICATE UNDER 37 CFR 1.10

'Express Mail' mailing label number: EL920768689US

Date of Deposit: July 5th, 2001

I hereby certify that this correspondence is being deposited with the United States Postal Service 'Express Mail Post Office To Addressee' service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

By: 
Name: Omesh Singh

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Before consideration of the above-referenced Continuation Application, please enter the following amendments:

In the Claims

Please enter the following new claims 16-29:

16. (New) A method of removing irregularities from a media surface comprising:
detecting an irregularity on the surface of the media with a detector;
directing, upon detecting an irregularity beyond a first predetermined amount, a laser to that irregularity, wherein the laser is in electronic communication with the detector; and
energizing the laser upon the detector detecting an irregularity beyond the first predetermined amount to thereby impart a laser output at that irregularity to reduce the irregularity to a degree less than a second predetermined amount.

17. (New) A method as claimed in claim 16 wherein the laser output is from a pulsed laser.
18. (New) A method as claimed in claim 16 wherein a burnishing process is effected to thereby reduce, preferably remove, the irregularities and minimize residue on the disc surface.
19. (New) A method as claimed in claim 16 further including varying the power of the laser output for effecting reduction of the irregularity.
20. (New) A method as claimed in claim 16 further including measuring the irregularity and determining the time and power necessary to effect burnishing for reduction of the irregularity.
21. (New) A method as claimed in claim 20 further including feeding back measurements of the irregularity as an output to thereby regulate the laser power so that the irregularity is effectively reduced to a predetermined amount.
22. (New) A method as claimed in claim 16 wherein the media surface is a disc surface.
23. (New) An apparatus for cleaning a media surface comprising:
a detector for detecting asperities on the media surface;
a burnishing laser, in electronic communication with the detector, for direction to one or more irregularities detected on the media surface when the irregularities detected are beyond a first predetermined amount; and
means for energizing the laser upon the detector detecting an irregularity beyond the first predetermined amount to thereby impart a laser output at that irregularity directed to each irregularity that is beyond a first predetermined amount to reduce each irregularity to a degree less than a second predetermined amount.
24. (New) Apparatus as claimed in claim 23 wherein the laser output is from a pulsed laser.
25. (New) Apparatus as claimed in claim 23 including means for varying the power of the laser output for effecting reduction of the irregularity.

26. (New) Apparatus as claimed in claim 23 including means for measuring the irregularity and means for determining the time and power necessary to effect burnishing for reduction of the irregularity.

27. (New) Apparatus as claimed in claim 26 including means for feeding back measurements of the irregularity as an output to thereby regulate the laser power so that the irregularity is effectively reduced to a predetermined amount.

28. (New) An apparatus for cleaning a media surface comprising:
a detector for detecting one or more irregularities on the media surface, wherein the detector includes a laser focusing apparatus;
a burnishing laser for direction to one or more detected irregularities that are beyond a first predetermined amount, wherein the burnishing laser is in electronic communication with the detector; and
means for energizing the laser upon the detector detecting an irregularity beyond the first predetermined amount to thereby impart a laser output at that irregularity to reduce the one or more irregularities beyond a first predetermined amount to a degree less than a second predetermined amount.

29. (New) An apparatus as claimed in claim 28, wherein the laser focusing apparatus comprises an optical fiber, a mirror and a lens, wherein the optical fiber, the mirror and the lens are aligned such that the energy source is focused to the media surface.

REMARKS

New claims 16-29 are added by this amendment. No new matter has been added. If the Examiner believes a telephone conference would help expedite the prosecution of this application, please contact the undersigned at telephone 612.336.4706.

Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300

Natalie D. Kadievitch

Natalie D. Kadievitch
Reg. No. 34,196
NDK:PSTdb

Date: July 5, 2001

